

In the Claims:

The claims are as follows:

1. (Currently Amended) A method for rejecting a component ~~from a pick/place head in a component placement machine~~ during a placement cycle, the steps comprising:

a) providing a component placement machine ~~comprising~~ including a housing adapted for movement along an X and a Y axis above a printed circuit board and having a frame rotatably attached thereto, said frame having a plurality of pick/place heads disposed thereupon;

b) providing a vision system ~~comprising a~~, including at least one camera contiguous with said housing;

c) providing a reject station contiguous with said housing and adapted to receive said component;

e) ~~d)~~ picking a component said component from a supply of components using at least one of said plurality of pick/place heads;

d) ~~e)~~ capturing ~~an~~ at least one image of said picked component, and processing said captured image to determine whether said picked component is ~~placeable or non-placeable~~ a placeable component or a non-placeable component;

~~e) providing a reject station contiguous with said housing and adapted to receive a component; and~~

f) placing said placeable component onto said printed circuit board at a predetermined location; and

f) g) rejecting said ~~picked~~ non-placeable component into said reject station when said ~~picked component is determined to be non-placeable;~~

wherein said rejecting step (g) is accomplished substantially completely during at least one of said picking step (d), said capturing step (e), and said placing step (f) of another of said plurality of pick/place heads.

2. (Cancelled)

3. (Currently Amended) The method for rejecting a component ~~from a pick/place head in a component placement machine~~ during a placement cycle as recited in claim 1, wherein said rejecting step (f) (g) comprises means for releasing said ~~picked non-placeable~~ component ~~from said~~ from at least one of a plurality of said pick/place heads such that the said ~~picked non-placeable~~ component is deposited into said reject station.

4. (Cancelled)

5. (New) A method for rejecting a component comprising:

- a) providing a component placement machine including a plurality of pick/place heads and a reject station adjacent said plurality of pick/place heads;
- b) picking said component with one of said plurality of pick/place heads;
- c) determining placeability of said component;
- d) placing said component, if said component is determined to be a placeable component;

e) rejecting said component, if said component is determined to be a non-placeable component;

wherein said rejecting step (e) of said non-placeable component occurs during one of method steps (b), (c) and (d) of another of said plurality of pick/place heads.

6. (New) A method for rejecting a component comprising:

a) providing a component placement machine including a plurality of pick/place heads and a reject station adjacent said plurality of pick/place heads;

b) picking said component with one of said plurality of pick/place heads;

c) determining placeability of said component;

d) placing said component, if said component is determined to be a placeable component;

e) rejecting said component, if said component is determined to be a non-placeable component;

wherein said rejecting step (e) of said non-placeable component does not interrupt said method steps (b), (c) and (d) of another of said plurality of pick/place heads.